

UNITED STATES DEPARTMENT OF COMMERCE

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APPLICATION NO. **FILING DATE** FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 09/309,130 05/10/99 RAKAUSKAS М 28572/32531A **EXAMINER** IM22/0314 MARSHALL O TOOLE GERSTEIN MURRAY & BORUN KRUER, K 6300 SEARS TOWER PAPER NUMBER **ART UNIT** 233 SOUTH WACKER DRIVE CHICAGO IL 60606-6402 1773 **DATE MAILED:** 03/14/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 09/309,130

Applicant(s)

Examiner

Kevin Kruer

Group Art Unit 1773

Rakauskas

Responsive to communication(s) filed on Nov 3, 2000 ☐ This action is FINAL. ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. A shortened statutory period for response to this action is set to expire _____3 ___ month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a). Disposition of Claims Of the above, claim(s) ______ is/are withdrawn from consideration. Claim(s) _______is/are allowed. is/are objected to. Claim(s) ☐ Claims ______ are subject to restriction or election requirement. **Application Papers** ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. The drawing(s) filed on ______ is/are objected to by the Examiner. ☐ The proposed drawing correction, filed on _______ is ☐approved ☐disapproved. ☐ The specification is objected to by the Examiner. ☐ The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received. received in Application No. (Series Code/Serial Number) received in this national stage application from the International Bureau (PCT Rule 17.2(a)). *Certified copies not received: ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). Attachment(s) Notice of References Cited, PTO-892 ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). ☐ Interview Summary, PTO-413 ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Notice of Informal Patent Application, PTO-152 --- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 14 and 17-54 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no support in the specification for the limitation "unwarped." Applicant is asked to point out where in the specification there is support for such a limitation or amend the claim to remove the new matter.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 14, 17, 24-29, 36-41, and 48-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder (US 6,004,648) in view of McClain (US 1,299,747). Snyder teaches a two ply or even ply veneer laminate panel. The substrate veneer ply is preflexed to substantially break the grains of the substrate ply, and then bonded to the face veneer (abstract). The veneer sheets are held together with any glue which is commonly known in the art (col 3, lines 43-53).

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The humidity of the veneers would be from about 4% to about 20% (col 3, line 40). The sheets are bonded together through the application of pressure at a temperature of about 135-147C (depending on the adhesive used) (col 3, line 65- col 4, line 6).

Snyder does not teach that the adhesive should comprise a saturated sheet. However, McClain teaches a veneered wood substrate wherein an adhesive impregnated sheet of porous. fibrous material, such as paper, is interposed between the sheets of wood or other materials which are to be united (col 2, lines 64-73). The layers to be united may have different thicknesses so long as the layers to be united are each thicker than the impregnated fibrous layer (col 4, lines 102-114). The stack is then treated in a suitable manner such as by the application of heat and pressure to first soften the adhesive, in order to bring the adhesive into intimate contact with the surfaces to be united, and then hardened so as to provide a strong bond between the surfaces (col 2, lines 84-100). Solvent is removed from the impregnated sheet prior to lamination in order to prevent the laminated layers from absorbing the adhesive's solvent (col 3, lines 20-29). The fibrous sheet material substantially increases the strength of the finished product, as it provides a strong, thin, supporting sheet between adjacent layers of wood. This tends to prevent any splitting or breaking away of any part of the lumber (col 3, lines 30-37). Thus, it would have been obvious to one of ordinary skill in the art to utilize the adhesive taught in McClain as the adhesive layer taught in Snyder in order to obtain good adhesion while strengthening the finished product.

Snyder also does not teach that a saturated resin sheet to the non-veneered surface of the substrate. However, McClain teaches that saturated paper products may be applied to the nonveneered surface of a wood laminate in order to provide moisture, oil and acid resistance (col 4,

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lines 115+). Therefore, it would have been obvious to one of ordinary skill in the art to apply a resin saturated paper sheet to the non-veneered surface of the laminate taught in Snyder in order to provide oil, water, and acid resistance.

The limitations of claims 26-29, 38-41, 52, and 54 are process limitations. Process limitations do not patentably distinguish a product claim from a product taught in the prior art unless applicant can show that the method of making the claimed product inherently results in a product that is different from the teachings of the prior art. In the present application, no such showing has been made.

Snyder (US 6,004,648) in view of McClain (US 1,299,747), as applied to claims 14, 17, 24-29, 36-41, and 48-54 above, and further in view of Guyette (US 5,425,986). Snyder in view of McClain is relied upon as above, but neither reference teaches that the resin coated paper sheet should have a basis weight of about 40 pounds per ream to about 100 pounds per ream. However, Guyette teaches a high pressure laminate comprising a fiberboard core. and intermediate resin impregnated paper sheet or lamina, and a decorative paper or lamina (abstract). Guyette teaches that the intermediate resin impregnated paper should comprise a kraft paper having a weight of 25 to about 400 grams per square meter (col 3, lines 53-58). It would have been obvious to one of ordinary skill in the art to utilize a kraft paper with a weight of 25-400 grams per square meter as the resin coated paper of the laminate admitted by Applicant, because Guyette teaches that kraft paper with such weights are porous enough and strong enough to be used as intermediate resin impregnated sheets in wood composite laminates.

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- 6. Claims 18, 30, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder (US 6,004,648) in view of McClain (US 1,299,747), as applied to claims 14, 17, 24-29, 36-41, and 48-54 above, and further in view of Applicant's Admissions. Snyder in view of McClain is relied upon as above. Specifically, McClain teaches that any desired adhesive may be utilized, but does not suggest the use of melamine adhesives in the impregnated sheets. However, Applicant admits that melamine/formaldehyde resins are commonly used to secure wood veneers to core substrates by lamination processes in the art (page 2, lines 20-27). Such adhesives are resistant to discoloration and exceptional bonding strengths. Therefore, the examiner takes the position that it would have been obvious to utilize a melamine/formaldehyde resin as the adhesive impregnating material taught in McClain because such adhesives are commonly utilized in the art to bond wood substrates and are superior is discoloration resistance and bond strength.
- Claims 22, 34, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder (US 6,004,648) in view of McClain (US 1,299,747) and Applicant's Admissions, as applied to claims 14, 17, 18, 24-30, 36-42, and 48-54 above, and further in view of Guyette (US 5,425,986). Snyder in view of McClain and Applicant's Admissions is relied upon as above, but Applicant does not admit that the resin should comprise about 45-65wt.% of the resin-saturated sheet. However, Guyette teaches that the resin in the resin impregnated intermediate sheet should comprise 5 to 75 percent by weight of the resin impregnated intermediate sheet. Therefore, it would have been obvious to one of ordinary skill in the art to utilize a resin-saturated sheet comprising 5-75wt.% resin because Guyette teaches that sheets comprising 5-75wt% resin exhibit

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sufficient adhesion to the surrounding substrates when utilized as intermediate layers in wood composite laminates.

8. Claims 19-21, 31-33, and 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder (US 6,004,648) in view of McClain (US 1,299,747) and Applicant's Admissions, as applied to claims 14, 17, 18, 24-30, 36-42, and 48-54 above, and further in view of Brooker et al. (US 5,723,221). Snyder in view of McClain and Applicant's Admissions is relied upon as above, but Applicant's admissions are relied upon as above. Applicant teaches that melamine resin is commonly utilized as an adhesive in wood composite laminate but does not admit that the resin should comprise about 98wt% melamine. However, Brooker teaches that it is well known in the art to utilize melamine aldehyde resins to saturate paper sheets utilized in high or low pressure processes. To the melamine resin may be added a variety of fillers (col 2, lines 8+). Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to utilize a resin composition comprising 98wt% melamine and 2wt% other fillers.

Applicant also does not admit that the adhesive resin may be a melamine/urea blend. However, Brooker teaches that urea-formaldehyde may be advantageously added discreetly or in combination with the melamine resin for use as an adhesive in both high and low pressure decorative laminates (col 3, lines 3+). Thus, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to blend urea and melamine resins in such a way as to advantageously effect the adhesion of the laminate. The courts have held that when the general conditions of a claim are known in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 f.2d 456, 105 USPQ

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233, 235, (CCPA 1955). Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to utilize the melamine and urea in any combination in order to optimize adhesion, reduce shrink, and optimize processing time and costs.

Response to Arguments

9. Applicant's arguments with respect to claims 14 and 17-54 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is (703) 305-0025. The examiner can normally be reached on Monday-Friday from 7:00 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached on (703) 308-2367. The fax phone number for the organization where this application or proceeding is assigned is (703)305-5436.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0651.

Kevin R. Kruer
Patent Examiner